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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/934,415	08/21/2001	Brendan J. Kitts	VIGN1160-1	8220
44654	7590	10/14/2005	EXAMINER	
SPRINKLE IP LAW GROUP 1301 W. 25TH STREET SUITE 408 AUSTIN, TX 78705			ZHOU, TING	
			ART UNIT	PAPER NUMBER
			2173	

DATE MAILED: 10/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/934,415

Applicant(s)

KITTS, BRENDAN J.

Examiner

Ting Zhou

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-18 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The amendment filed on 22 August 2005 have been received and entered. Claims 1-18 as amended are pending in the application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5 and 10-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chi et al. U.S. Patent 6,509,898 and Jammes et al. U.S. Patent 6,484,149.

Referring to claims 1, 12, 13 and 14, Chi et al. teach a system and method comprising a general purpose computer having memory capable of operating pursuant to instructions comprising an algorithm (Chi et al.: column 5, lines 46-67 and further shown in Figure 1), wherein the algorithm further comprises the steps of loading the interaction metric between items (parent-child, sibling-sibling and usage information between nodes) (Chi et al.: column 7, lines 36-45) into memory, optimizing the placement of nodes and edges (links) pursuant to the interaction metric (using the interaction metric, or parent-child, sibling-sibling relationships, usage information, etc. to make layout decisions in order to place the nodes and links to maximize screen real estate, for example) (Chi et al.: column 7, lines 36-45 and column 8, lines 27-53) and generating a graphical representation of the nodes and edges with corresponding

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interaction metrics (defining relationships between elements, such as parent-child relationships and usage information to optimize the layout of the display according to the relationships, i.e., displaying the highest used sibling nodes farthest apart from each other under the parent node so that they have the most growth space) (Chi et al.: column 2, line 16 – column 3, line 12, column 7, lines 36-45 and column 8, lines 28-52). However, although Chi et al. teach nodes representing items such as web pages and linked edges representing interactions, or relationships between the items, Chi et al. fail to explicitly teach the interaction metric between items are retail items and the items represented by the nodes and edges are retail items. Jammes et al. teach graphically displaying nodes representing items and edges representing the relationships between the items (as shown on the left hand side of the interface in Figure 4, nodes, such as folders represent items such as “Clothing”, “Automotive”, “Computer”, etc. and edges, or the hierarchical tree-like structures between the items represent the interactions, i.e. parent-child relationships, between those items) similar to that of Chi et al. In addition, Jammes et al. further teach the interactions between retail items and the items represented by the nodes and edges are retail items (the items are products, such as cars, computers, etc. and the interaction, i.e. relationships between the retail items are shown via the hierarchical display) (Jammes et al.: column 30, lines 30-39 and Figure 4). It would have been obvious to one of ordinary skill in the art, having the teachings of Chi et al. and Jammes et al. before him at the time the invention was made, to modify the optimization and display of nodes and edges representing items according to the interactions between items taught by Chi et al. to include the display of relationships between items in a retail setting of Jammes et al. One would have been motivated to make such a combination in order to provide a convenient and efficient tool that is well suited to the task of developing and managing the

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content of an electronic store. With the increasing popularity and accessibility of the Internet, the number of merchants using and desiring to use the World Wide Web to advertise and sell products is growing rapidly. Therefore, this combination will produce an electronic shopping system that provides a clear and optimized view of products and merchandise.

Referring to claims 2 and 15, Chi et al. teach the interaction metric being a conditional probability (usage information such as frequency of use) (column 2, lines 36-44 and column 8, lines 28-38).

Referring to claim 3, Chi et al. teach the interaction metric being based on correlations between items (parent-child and sibling-sibling relationships amongst the elements) (column 8, lines 28-32).

Referring to claims 4 and 16, Chi et al. teach the interaction metric comprising at least one of a cross-elasticity and cross-correlation between two different variables (the parent-child and child-child relationships show the cross-correlation between the two items (column 3, lines 1-11 and column 8, lines 28-52).

Referring to claims 5, 10, 11 and 17, Chi et al. teach the optimum placement of nodes and edges adheres to at least one of minimizing number of crossings between edges, distance between linked nodes is minimized, graph area is minimized, horizontal and vertical symmetries are maximized, and an angle between two edges onto a node is greater than or equal to a predetermined constant (spacing the root nodes farthest apart from each other so that the children nodes can be placed directly under the root nodes, therefore minimizing the distance between linked nodes and the number of crossed relationship lines) (column 3, lines 1-11 and column 8, lines 39-52).

Referring to claim 18, Chi et al. teach there are multiple paths from at least one node to at least one other node (as shown in Figure 19, there are at least two paths from node 1919 to node 1920, namely, one path of going from node 1919 to 1922 and then to 1920, or another path going from node 1919 to node 1921 and then to 1920).

3. Claims 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chi et al. U.S. Patent 6,509,898 and Jammes et al. U.S. Patent 6,484,149, as applied to claims 1, 2, 4 and 5, and Weinberg et al. U.S. Patent 6,144,962.

Referring to claims 6-9, Chi et al. and Jammes et al. teach all of the limitations as applied to claims 1, 2, 4 and 5 above. Specifically, Chi et al. and Jammes et al. teach the display of node-link relationships for elements based on interaction metrics (defining relationships between elements, such as parent-child relationships and usage information) (Chi et al.: column 2, lines 16-46, column 7, lines 36-45 and column 8, lines 28-52). However, Chi et al. and Jammes et al. fail to explicitly teach if the interaction metric is below a predetermined threshold the interaction between at least one of the below-threshold item and an edge is not graphically displayed.

Weinberg et al. teach displaying node-link relationships for elements based on interaction metrics (parent child relationships) (Weinberg et al.: column 2, lines 32-48) similar to that of Chi et al. and Jammes et al. In addition, Weinberg et al. further teach not displaying the interaction if the interaction metric is below a predetermined threshold (only displaying links that are above a minimum activity threshold level) (Weinberg et al.: column 28, lines 56-67 and column 9, lines 1-4). It would have been obvious to one of ordinary skill in the art, having the teachings of Chi et al., Jammes et al. and Weinberg et al. before him at the time the invention was made, to

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modify the method and system for displaying items based on their interactions of Chi et al. and Jammes et al. to include displaying only the interactions that are above a certain threshold, as taught by Weinberg et al. One would have been motivated to make such a combination in order to avoid cluttering the display space with unimportant or non-relevant information, providing more space and focus for important information.

Response to Arguments

4. Applicant's arguments filed 22 August 2005 have been fully considered but they are not persuasive:

5. The applicant argues that the graphical model taught by Chi does not model an interaction metric, but rather is built based on statistics related to individual web pages and not an interaction metric that models interactions between different items and therefore, Chi does not teach or suggest an interaction metric. The examiner respectfully disagrees. While Chi's model of the nodes and edges is based in part on usage information, it is also displayed based on the relationships, specifically, the parent-child and sibling-sibling relationships between the nodes. Chi teaches that the layout algorithms used to build the screen display tries to "reveal subtle *relationships* amongst the elements", as recited in column 8, lines 28-32. Furthermore, Chi also states that the displayed graph of nodes and links are built with the root node at the center and sibling nodes spread out radially about their parent, as recited in column 2, line 62-column 3, line 11; therefore, the displayed graphs shows that nodes that are positioned radially about another node are the children nodes of that parent node and are the sibling nodes of each other, thus

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showing the parent-child and sibling-sibling relationships, i.e. interactions, between the displayed nodes.

6. The applicant also asserts that the items of Jammes are not retail items, i.e. “store” and “automotive” are not retail items. The examiner respectfully disagrees. Items such as “Automotive” (i.e. cars), “Computer” and “Clothing” are all items that can be sold to a consumer at a retail store and can therefore be considered retail items. Furthermore, the tree-like display shows the hierarchical relationships, i.e. parent-child and sibling-sibling relationships between the items (for example, retail items such as “Automotive”, “Computer” and “Clothing” all have sibling relationships since they are in the same hierarchical level under a parent, or root level); therefore, the hierarchical display of Figure 4 shows the relationships, i.e. interactions between the displayed retail items.

7. Lastly, the applicant argues that retail items freely associate and do not necessarily have predefined hierarchical relationships with each other, and that neither Chi nor Jammes teach an interaction metric between retail items that models the free, i.e. not predefined interactions between items. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., interaction metric between retail items that *models the free (i.e. not predefined) interactions* between items) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). As presently recited, the

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applicant's claims simply provide limitations for loading an interaction metric between retail items and optimizing the placement of nodes and edges in accordance with the interaction metric; the applicant's claims do not explicitly recite any limitations specifying the retail items freely associating and not having predefined interactions.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ting Zhou whose telephone number is (571) 272-4058. The examiner can normally be reached on Monday - Friday 7:00 am - 4:30 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca can be reached at (571) 272-4048. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TZ



**RAYMOND J. BAYERL
PRIMARY EXAMINER
ART UNIT 2173**